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U. S. DEPARTMENT OF AGRICULTURE

WATCH *your step!*

AVOID FARM

ACCIDENTS

Farmers Bulletin No. 2101
UNITED STATES DEPARTMENT OF AGRICULTURE

This booklet suggests ways you can reduce risks, injury, and even death from farm accidents. It emphasizes doing every job the safe way.

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This publication, by a committee, of which H. L. Garver, Agricultural Engineering Research Division, Agricultural Research Service, was chairman, is a revision of and supersedes Miscellaneous Publication No. 608, Watch Your Step: Avoid Farm Accidents.

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An ACCIDENT is LOOKING for a PLACE to HAPPEN



An accident, right now, somewhere, is looking for a place to happen. To help prevent your farm from being such a place is the aim of this booklet.

HERE ARE THE TWO BASIC RULES FOR FARM SAFETY:

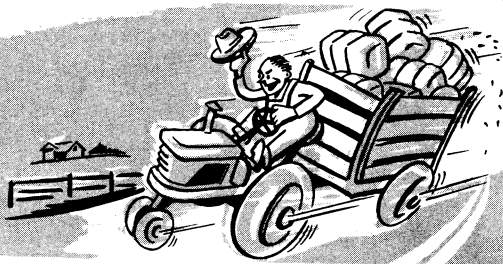
1. PREVENTION. Sharpen your eyes and wits to discover all possible hazards on your farm and remove them immediately—tomorrow may be too late. Get in the habit of doing things the safe way, and see that every member of your household and every worker on your farm learns safety habits.

2. PREPAREDNESS. Keep a first-aid kit or cabinet handy, keep it well supplied, and know how to use it. Enroll in a Red Cross first-aid course. Keep fire-fighting equipment handy, keep it in good working order, and know how to use it.

The farmer, fit to work, feeds the Nation. His farm is a source of supply for the security of all. It is important to the Nation—as well as to the farmer himself—that he stay in sound working condition.

Unfortunately, farmers are not always in good condition. Accidents—mostly avoidable—whittle away at farm manpower and farm income.

MACHINERY and EQUIPMENT



Tractors.

Farm tractors can be safe or dangerous depending upon how they are operated. In the hands of inexperienced, reckless, or careless operators they are dangerous, but when skillfully driven by trained, careful operators they are safe. Children are not permitted to operate automobiles on the highways. They should not be permitted to operate tractors.

Here are some suggestions on handling tractors that may help avoid accidents:

1. Be sure gears are in neutral before cranking.
2. Apply brakes slowly to avoid overturning. Keep brakes adjusted and pedals locked together when in road gear.
3. Stop before entering highways.
4. Use engine compression to hold your tractor back when descending hills or steep grades. Keep tractor in gear.
5. Learn to engage the clutch smoothly. Jerky starts are dangerous.
6. Hitch only to drawbar.
7. Speeds over 7 to 8 miles an hour may be dangerous, especially with tricycle-type tractors.
8. Dismount only after the tractor is stopped and brakes are locked.
9. Keep away from belts and pulleys when they are in motion.

10. Doubling the speed makes overturning four times as likely. Slow down before turning.

11. Use increased care on rough or hilly ground or near ditches.

12. Hot radiators on tractors, trucks, and automobiles can scald faces and hands severely. Cool and let the steam escape before opening the radiator cap.

13. *Do not refuel* when engine is running. It is better not to refuel when engine is hot. Gasoline spilled on the hot exhaust pipe will ignite.

14. Keep the shield on the power takeoff at all times.

15. Do not permit riders either on tractor or on towed equipment.

16. Oil only when engine is stopped.

17. Use an iron hook to handle the drawbar.

18. Keep out of the space between the tractor and implement.

19. When rear wheels are stuck, back out or get pulled out.

20. Keep tractors in separate garage or shed away from other buildings and combustible materials, when not in use.

Implements—treads and cogs, blades, rolls, fans, belts, and bolts—can be either friend or foe, according to who is master.

The service and efficiency of a machine are largely products of respect, care, and intelligent handling.

A little thought, and less haste, may prevent a mangled hand, a crushed leg, a nasty slash. Safety is promoted by

positive good habits. For example—

Think! Always stop the motor before dismounting from the tractor to adjust or couple a trailer or implement.

On a steep slope, plan your course before you start. Always guard completely against an upset.

Taking chances with corn pickers, mowers, binders, and combines does not jibe with common sense. What may happen can mean work for the garage or for the hospital. Would it not pay to remember that "Jack be nimble, Jack be quick" is a tip for an acrobat but hardly for a sober-minded farmer with a bit of oiling or machine

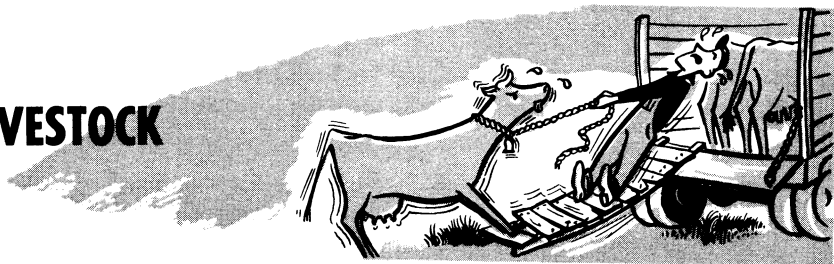
cleaning to be done or adjustments to be made. It is sound practice for a farmer always to raise the cutter bar before the tractor is attached to the mower.

Danger lurks in unguarded drives; do not relax the watch on them.

Threshing machinery can be murderous; do not trust it too far. Do not attempt to put a belt on a pulley while the machine is in operation. Stop operations long enough to make repairs and adjustments, no matter how trivial they may be.

Do not attempt to remove or dislodge material from corn picker rolls when they are in motion.

LIVESTOCK



Most livestock accidents occur with children under 14 years of age and older persons between 50 to 80 years of age.

A bull, boar, or a sow with pigs, even a vicious goat or ram, can cause a serious injury. A kicking horse is a hazard that calls for constant carefulness.

A few practical hints:

1. Handle stock quietly, gently, and firmly and with suitable handling equipment.

2. Speak to an animal before entering its stall; then stroke its neck or back, if it is not too nervous. A nervous animal behaves best when handled by someone in whom it has confidence.

3. Ring the nose of the bull. Always lead him with a safety staff. Keep him in a safekeeper pen of the type developed by the U. S. Depart-

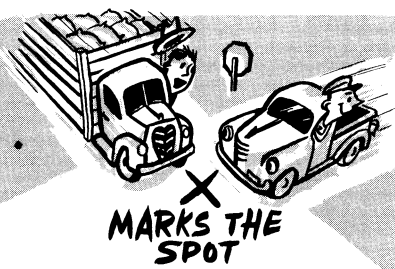
ment of Agriculture. Never trust any bull. The rapid spread of artificial-breeding associations in recent years enables most dairy farmers to free themselves of the bull hazard on the farm.

4. Human beings are susceptible to many animal diseases. Learn and apply every precaution in the treatment and quarantine of sick animals or fowls and disposal of dead ones. Practice strict sanitation at all times.

5. Use caution when handling animals with diseases such as anthrax, rabies, tuberculosis, brucellosis, and tularemia. Follow instructions of a competent veterinarian.

6. Keep fences, gates, and equipment in good repair. Inadequate facilities invite accidents.

MOTOR VEHICLES



Make sure a vehicle is properly supported and blocked when working around it. Do not run the motor in a closed building. Small children, unless carefully watched, may be seriously hurt by backing cars. Older children at play may release the brakes, with disastrous consequences.

When an operator enters a public road he assumes a public responsibility. He must respect the rights of others and look out for their safety as well as his own. Yet thousands of accidents occur every year at farm entrances because of sudden and careless turns into or off public roads.

Much driving is done on imperfect roads having sharp curves, steep grades, slippery surfaces, high crowns, narrow pavements or no pavement, and inadequate lighting.

But even our poorer roads do not in themselves cause accidents, as is proved by the fact that many thousands of cars pass safely for every one that comes to grief. A capable driver is safe on almost any road, and if road conditions are bad he knows enough to stay at home or to go the long way around. The responsibility for practically every motor-vehicle accident traces directly to one driver—to some failure on his part to do the right thing at the right time. Many accidents result from recklessness; more often it is ignorance, poor judgment, selfishness, or inexperience. It is every driver's duty to make himself competent and safe.

What is a safe driver? He should be even in temper, neither irritated nor confused by the traffic around him. His mind should always be on his driv-

ing. He must not be a take-a-chance driver, when human lives are at stake. If he cannot measure up to these requirements, he ought at least to recognize his deficiencies and make every necessary allowance for them.

First Responsibilities. Before anyone gets behind the steering wheel of an automotive vehicle he should know that his car is equipped and ready for the road.

Any automotive equipment should be kept in safe operating condition. Periodic inspection and replacement of worn or damaged parts will prevent accidents due to failure of steering gear or brakes. Retreading or replacement of worn tires will reduce the likelihood of skidding and help to avoid blowouts. Do not neglect the headlights. For efficient lighting they must be clean and equipped with correct bulbs and lenses, and must be focused right so as not to blind other drivers.

As for the driver, he must know how to control his car and must be physically and mentally fit. Fatigue, illness, and liquor are notoriously incompatible with safety. The good driver knows and abides by the general rules of the road and all local regulations. These are usually available in printed form, obtainable from police officials or motor-vehicle authorities.

Driving After Dark. About one-half of fatal automobile accidents to rural people occur between dusk and dawn, according to the National Safety Council.

Suggestions for preventing such accidents are summed up as follows:

1. Slow down after dark.

2. Use the passing beam when meeting other cars.

3. Watch out for pedestrians.

4. Adjust and repair headlights periodically.

5. Keep headlights and windshield clean.

6. Don't drive when you're drowsy.

7. Stop well off the road at night.

Traffic and highway engineers have devised a system of signs and signals as a guide to action where special rules are in force or where care must be taken. It is the driver's responsibility to know the rules and regulations.

A STOP sign posted where a side road enters a main highway means exactly what it says—no less. After stopping, a driver may proceed when it is safe to do so. Since the driver on the main road expects other drivers to yield the right-of-way, disregard of STOP signs is a short cut to disaster. Warning signs are commonly posted on the roadside where special caution is required, as at railroad crossings, on hills and curves, and at narrow bridges. They are there because they are needed, and their warnings should never be ignored.

Other signs warn of the presence of schools, hospitals, busy crossings, and various places where vehicles or pedestrian traffic is heavy. Reduce speed to pass such places safely with the car under complete control.

Speed. The most important single cause of accidents is speed—too much speed in the wrong place. No one is justified in risking death, his own or another's—or disabling injuries for the sake of saving a few minutes. The law may set a speed limit, but safety even within that limit remains the responsibility of the driver.

A car traveling 40 miles an hour is moving as fast as an object falling from the top of a four-story building—and if it hits something solid the effect is just as bad. Remember, too, that you can stop in about 75 feet when traveling at 30 miles an hour, but it takes 225 feet to stop at 60 miles an

hour. A mile-a-minute speed is equivalent to 88 feet a second, which means that in an emergency the car will travel 50 feet or more before the driver can move his foot to the brake pedal. If the driver will always choose his speed so that he can control his vehicle in any emergency, it is probable that there will be no emergency.

Protecting the Driver. If the car driver has obligations toward pedestrians, the reverse is equally true. Pedestrians should walk on the left side of the highway, on the road shoulder if possible, but at least on the extreme edge of the pavement. Those who must walk on the road at night should wear light-colored clothing, carry conspicuously a white newspaper or handkerchief or, still better, carry a lighted lantern.

A horse-drawn vehicle or a farm machine should, of course, carry a lantern at night. A disabled vehicle should be moved off the pavement promptly or be protected by lanterns or flares.

Children should not be permitted to play on the highway. Livestock should be fenced off the right-of-way. When cattle must be driven across a public road, the crossing should never be at a place concealed from approaching traffic by hills or curves.

Roadside market stands should provide parking space off the pavement.

Even so simple a thing as clearing brush from a fence corner may assist greatly in providing a safe view at an intersection and so prevent accidents.

Tractors on the Highway. Observe highway traffic regulations and the safety precautions for marking, lighting, and driving tractors and towing machinery or trailers. Use lights and reflectors or reflective material on front and rear, and left side on tractors and trailing equipment, as required by highway regulations or recommended by safety organizations for your self-protection. Use a high flag on slow-moving vehicles on hilly roads to increase the distance at which they may be seen over hilltops.

General Rules of the Road

The common rules of the road for motor-vehicle drivers are:

1. Drive to the right when meeting vehicles or where approaching vehicles may be hidden from view.

2. Drive to the left when passing vehicles from behind.

3. Do not pass a vehicle near the crest of a hill or on a curve.

4. Do not reduce speed suddenly or change direction without signaling.

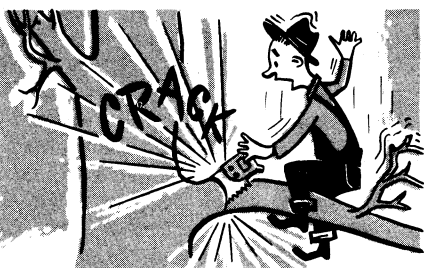
5. Always keep the car under control.

6. Keep a safe, clear stopping distance ahead.

7. At night, drive so that it is possible to stop within the distance clearly illuminated by the headlight beam.

8. When the road is slippery cut down speed accordingly. Skid chains and winter treads are often necessary as well as helpful.

HAND and POWER OPERATED TOOLS



Saws are useful tools when properly handled but when used carelessly or by inexperienced operators they can be extremely hazardous. In recent years portable saws powered by electricity or individual gas engines for bucking logs and clearing brush have added new saw and fire hazards. (See Gasoline, p. 13.)

Study every setup with a view to preventing accidental starting of motors, and the unintentional shoving or crowding of the operator by another person. Have clear space and level footing around a power saw to prevent stumbling or tripping. Always place shields and screens and guards around every moving part and cutting edge, to the fullest degree practicable. Do not crowd a sawing job.

Always take time and forethought to keep fingers, arms, and clothing out of the way.

Shapers and jointers can cause very serious injuries. Use a notched stick to push material through them or through a saw.

Be careful when using the emery wheel. Keep the tool rest close to the wheel. Use the rim and not the side of the wheel. Be sure wheel is balanced and securely attached to the shaft.

Always wear goggles when using the grinding wheel.

Safety thinking on the care of edged tools is a mark of efficiency and a first step toward accident prevention.

Brush hooks, scythes, crosscut saws, axes, and adzes should be carried over the shoulder for safety.

Chisels, awls, punches, and gimlets belong in portable toolkits while being carried from place to place—not in overall pockets.

Skillful use of hand tools will do much to reduce the bill for human repair.

ELECTRICITY



Electricity is one of the safest sources of light, heat, and power for the farm. The use of electric lights reduces the fire hazard that exists in connection with the use of oil lamps and candles. Electric appliances, properly installed and used, frequently reduce the fire hazard that exists in connection with the use of appliances deriving heat and power from fuels of various types. It is most important, however, that all electric wiring and devices be installed properly to avoid special hazards due to the use of electricity itself. Electricity brings new hazards along with many blessings.

Some Pointers for Electrical Safety

1. Have wiring done only with approved materials by a competent electrician.

2. Be sure that your wiring complies with the requirements of the National Electrical Code, and with any local regulations that may be in force, before current is turned on at your meter.

3. Have all wiring inspected annually for safety and adequacy.

4. Use nonmetallic sockets instead of brass.

5. Use only approved cords and appliances. Keep portable cords away from water or dampness. Discard or promptly repair defective cords.

6. Do not run extension cords under rugs, over nails, or around pipes or radiators.

7. When you disconnect an appliance, pull on the plug, not on the cord.

8. Keep electrical appliances in good condition.

9. Use the correct size fuse or circuit breaker, and do not overload electrical circuits.

10. Do not tamper with or use substitutes for fuses or other protective devices.

11. Don't touch exposed wires unless you know the current is off.

12. Be sure that electric equipment, portable as well as stationary, is grounded when used in damp locations or where the operator is standing on concrete, on the ground, or close to metallic installations such as water pipes and stanchions.

13. If you need advice on installing a radio aerial or any other equipment, ask at the office of your local power supplier.

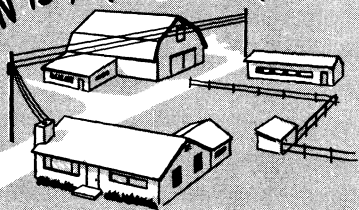
14. If you see anything wrong with the electric lines, call your electric power supplier at once. Before pulling pipes from wells or moving any equipment or buildings under or near the electric lines, call your power supplier and he will send a maintenance man to see that there is no contact with high voltage lines.

15. If the power is off, after determining that the fuses have not blown, call the power supplier immediately.

16. In recent years electric fences have come more and more into use, but extreme caution should be used in their operation. Under no circumstances should homemade controllers be used. And when electric controllers are purchased, make sure that they are of approved manufacture.

HOME and SERVICE BUILDINGS

INSPECTION IS PROTECTION



Hazards loom large because farmers work where they live and live where they work with no limit set by the 8-hour day. The sun is the "time clock" with overtime in dawn, dusk, and darkness. Weariness and varied responsibilities sharpen normal risks. Exposure to cold, dust, rain, snow, and wind also lower safety margins. Extreme youth and old age—the whole family with its varying garbs and activities—share the conditions and the hazards.

Suffocation is the leading cause of fatal accidents to children under 1 year old in the home. The National Safety Council figures show that between the ages of 1 and 64 the most frequent home accidents are fire burns. Among persons 65 years and older around 86 percent of injuries are due to falls.

Many home accidents occur on stairs and steps. Things out of place, improper use of equipment, and neglected repairs are frequent causes. Poor judgment, bodily frailty, and hurry are often involved. Children frequently suffer injuries because they have not been trained to play and work safely. Adults are often careless with the safety of the children. Good indicators of the forethought for safety on a farm are the conditions of doors, gates, hinges, latches, ladders, stairways, railings, and roofs.

Sound farm management carries numerous earmarks of safe living: Hinges that are lubricated, big enough for the job, properly attached; latches conveniently placed; gates and doors that open in the right direction and do

not sag; stairways solid under foot, not too steep, clear of obstacles; railings and roofs that can be trusted.

Most good farmers already recognize the importance of making safety a habit—a good habit. They are alert to make repairs of equipment as needed; to clear up trash and rubbish and make choretime walking safer; to remove fire hazards and reduce the risks of falls. Reminder of the dangers may help them check over the perils and avert accidents. The simple precautions suggested in this bulletin are generally accepted as common-sense. Bringing farm practice into line may benefit the health and well-being of the farmer, his family and working force, and prevent painful, costly, and even fatal accidents.

Ladders. Permanently located ladders should be fastened securely at both top and bottom. The top should project at least 4 feet above the landing to which it leads and stand at least 8 inches from the wall.

Movable ladders should be strong, in good repair, and stored in a dry place. Broken or rickety ladders should be destroyed. Brace the ladder and use both hands on the rails when climbing or descending.

Many people are injured when they fall from ladders placed against a building at too steep an angle for stability or too flat an angle to provide sure footing.

Use rope or block and tackle to lift objects.

On ramps where the slope is sharp, use cleats to prevent slipping.

Railings. Every opening in a floor large enough to put a foot through should be guarded by a railing or closed with a trapdoor that is kept closed when the opening is not in use. This applies to cellarways, hay chutes, ladderways, and hoistways.

A railing should be substantial and about 40 inches high. A weak railing may be worse than none at all, for it may invite someone to lean against it.

Openings used as hoistways in barns, storehouses, or other buildings call for railings at each floor or landing. Platforms more than 4 or 5 feet high require similar protection.

Inclined runways rising more than 4 or 5 feet should have guardrails; and if the slope is sharp, they should have cleats to prevent slipping.

Stairways of more than three steps should be equipped with handrails. This is particularly important when they lead to cellars or pits.

Sunken water barrels, deep ditches, pits, wells, cellarways, and similar traps for the unwary should be railed off or covered.

Stairways. Many serious accidents have resulted from stairways being cluttered with brooms, mops, wastebaskets, stacks of magazines, and children's toys.

Eternal vigilance may be applied to stairways by insisting on these first essentials, among others:

1. Walkway. A clear walkway the full width of each tread.

2. Plenty of light. Even stairways well lighted naturally by day should have artificial light for night use. For stairway service have "three-way" light switches at both the top and bottom of the stairway.

3. Handrails. Install handrails on both sides of open stairways; at least one rail for a closed stairway.

4. Stairway opening. Railing to guard every stairway opening.

5. Strength. Inspect the stair carriages, treads, and handrails. Replace if there is any indication of weakness. Do not patch.

Floors, Doors, and Windows. Termites, rot, loosened rails, wear and tear make the floors of barns and outbuildings a leading cause of accidents. Watch the boards under your feet and the support under the boards. Substitute a new plank when the old one becomes a hazard. Clean linoleum floors at once if grease or water is spilled. Tack down small rugs, or apply a nonskid base.

Keep door hinges oiled, tightly attached, and in good working order. Use a strong hook to keep doors open or closed. The fall of a heavy trapdoor can cause most serious injuries.

Suspend counterweights in weight boxes or housing where they cannot strike anyone if they should drop. Keep an eye on the ropes or chains and pulleys by which counterweights are suspended; replace them when they are weak.

It's a simple and wise precaution to install stops to prevent sliding or rolling doors from moving beyond their tracks.

Windows should be equipped with suitable catches, or cords and counterweights, to hold them open or closed.

Replace broken glass right away—and dispose of the jagged, discarded pieces where they will do no harm.

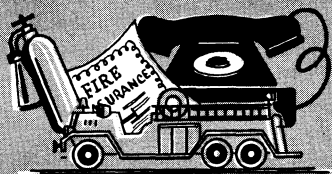
Roofs. Roofs and chimneys require frequent inspections for loose sheets of metal, slate, shingles, bricks, and tile. Gutters and downspouts should be kept in good repair.

For safety, when working on a roof, throw a long rope over the ridgepole and anchor one end firmly to a tree or post. Tie a fixed loop to encircle your body beneath your arms. Then if you slip on the roof, the rope will prevent your fall.

Heavy icicles hanging to the eaves, and heavy accumulations of snow above doorways, windows, paths, or passageways, should be removed.

Television antennas attached to chimneys weaken them.

FIRE



The National Fire Protection Association estimates that 3,000 or more persons are burned to death in farm fires each year. The annual cost of these fires is approximately \$150 million.

But the monetary loss, large as it is, represents only a part of the whole economic loss. Loss of potential income, because of the death or disablement of persons with earning capacity, loss of foodstuffs, loss of livestock, and loss of housing swell the actual losses by fires. Farm buildings, lacking the protection of organized fire departments and good water supply systems, frequently burn to the ground.

The most common sources of fires in farm dwellings, barns and other buildings are:

1. Defective or overheated heating or cooking equipment, flues, and chimneys, and also sparks from chimneys on combustible roofs.

2. Careless use of gasoline, kerosene, and other flammable liquids or gases.

3. Inadequate, defective, or misused electrical wiring systems, fuses, equipment, or appliances, and lack of effective lightning surge arresters.

4. Inadequate or defective lightning rods and grounds.

5. Spontaneous ignition of moist hay or of oily waste, rags, or other flammable materials.

6. Careless smokers, and children with matches.

7. Rubbish and trash, dry grass, weeds, and brush.

Faulty Flues and Heaters. A chimney should be well constructed, built from the ground up, set on a solid foundation. It should not depend for support on wooden construction. Nor should it be used to support any part of the building itself. Standard flue lining is recommended. Where it is not feasible to rebuild an existing chimney the walls of which are not of standard thickness, frequent cleaning will reduce the likelihood of fire. All defective chimneys should be rebuilt. Chimneys, flues, stoves, and furnaces should be cleaned frequently.

Stoves and furnaces should be set well away from walls and woodwork in accordance with manufacturers' standards or National Fire Protection Association standards. Each should rest on a substantial base, and combustible floors should be protected by fire-resistant insulating material under and adjacent to the base.

Smoke pipes should be supported substantially, kept in good condition, and separated 18 inches or more from woodwork or other flammable material. Use a ventilating thimble which provides at least 6 inches of air space all around any smoke pipe that passes through a partition, floor, or ceiling. Such partitions should be protected by airtight metal backed by asbestos board one-fourth inch or more thick. Remove ashes in metal cans, never in wooden or cardboard containers.

Combustible Roofs. Sparks from chimneys, bonfires, grass fires, forest fires, or from burning buildings some distance away frequently cause fires on roofs.

Fire-retardant roofing material should be used wherever possible. Where wooden shingles are used, a spark arrester should be provided on all chimneys of the building. Well-built ladders long enough to reach the roof should be kept convenient to any building with a combustible roof, ready to aid a quick attack if fire starts.

Lightning. Lightning rods installed and well maintained will provide practically complete protection against lightning damage to buildings. For best results, lightning rods should be installed in accordance with the National Code for Protection Against Lightning. Tracks for carriers and other large metal installations inside buildings should be grounded and bonded together to prevent electrical flashes from one body to another.

A metal roof, electrically bonded, properly grounded, and provided with air terminals to protect chimneys or other nonmetallic projections, usually affords satisfactory protection.

Spontaneous Ignition.

Hay, pea vines, and other roughages which are damp or not properly cured, frequently develop heat spontaneously when stored in large piles. The heating sometimes continues until the temperature of ignition is reached.

Any material that is found to be heating excessively should be removed. Flames have been known to break out during the removal of hot material. Fire-fighting equipment should be on hand to smother a flame if one should occur. The material which is heating should be moved to a safe distance away from buildings or other combustible materials, because it may burst into flame later.

Gasoline and Kerosene.

Gasoline and kerosene should be stored in underground tanks if possible. Withdrawal from tanks should be done by pump. It is extremely dangerous to transfer gasoline from one container to another inside a dwelling or other farm building. Such a transfer should be made in the open or be confined to the oil storage house. Never transfer

fuel from storage or from a container to a running engine. If gasoline or kerosene cannot be stored underground, it should be kept in a special building located 75 feet or more from other buildings. Use only "approved" metal containers, which should be painted red and lettered GASOLINE.

Trucks, automobiles, farm machinery, and other equipment powered by oil or gasoline engines should be stored and used only in places where a backfire or sparks cannot set fire to combustible materials.

Gas-Burning Appliances.

Many explosions, fires, and asphyxiations are traceable to gas. Adherence to a few simple precautions could prevent most of them.

Rigidly supported appliances fed through fixed piping are the first essential of safety. Flexible tubing, occasionally necessary, should be of substantial construction; the shutoff valve should be on the rigid pipe rather than on the appliance, to avoid leaving the tubing under pressure.

One way of being sure that gas-burning appliances are reliable is to know that they bear the label of the American Gas Association Laboratory.

Be sure that all installations are in accordance with National Fire Protection Association standards.

Care must be taken when installing tubing for liquid petroleum (LP) gas to be sure it is leakproof. The vapor from LP gas is heavier than air and will settle in the low spots. A spark or flame near it may ignite and cause a disastrous explosion.

Other Fire Hazards. Carelessly discarded cigarettes or matches, trash left in and around farm buildings, and fireplaces that are not equipped with a screen may result in fire.

Asphyxiation. The so-called "coal gas" is a characteristic accident breeder of rural homes. Care in the banking of fires at night, and in keeping chimney dampers always at least slightly open, will do much to provide a safeguard. So will attention to the adequate ventilation of rooms.

Burns and Scalds. Here are some precautions that can be taken to prevent burns and scalds in the home.

Never use or store gasoline in the house. Use nonflammable cleaning fluids only. Never fill a kerosene stove while it is burning. Keep matches in nonflammable containers out of the reach of small children. The use of kerosene for starting a fire is dangerous.

Turn saucepan handles away from the edges of tables and stoves. Keep kettles, pails, and tubs of hot liquids off the floor. Use care in handling hot liquids, particularly those containing grease.

Young children in particular should be kept at a safe distance from hot liquids—water, frying fats and oil, canning sirups, and the like.

Fire Protection. The minimum of fire-protection equipment needed on a farm consists of pump-tank extinguishers or chemical extinguishers, or both; and also fire pails, water barrels, and ladders. Such equipment should be kept in readily accessible places for instant use.

Still better is a pressure water system with conveniently located hydrants, and at least three 50-foot lengths of hose and nozzles in good condition. If the hose is ever used for other farm purposes, it should be returned to its place immediately. Power sprayers or other equipment of a similar kind may also be helpful for fighting fires.

Saving Your Family From Fire. It's very important to know exactly what you should do—how to save yourself if the house or building you are in suddenly catches fire. You never know when that might happen, so always be ready to act quickly. Here are some rules on what you should do in case of fire—be sure you understand and remember each one; it's a good idea, too, for you and your family to follow them in practicing regular fire drills at home:

1. Always look for and be ready to use different ways out of every room in the house. It is important

to remember, too, to do this when entering any other building.

2. Plan alternate escape routes from all normally occupied parts of the house—especially bedrooms.

3. Windows, porch roofs, ladders, back stairs, and outside fire escapes are some of the means of escape that can be used when normal stairways or exits are blocked.

4. Arrange for practical ways to rescue small children, and aged and sick persons.

5. Hold family fire drills. Practice using alternate escape routes and getting helpless members of the family out of the house quickly.

6. Get out of the house and, if possible, warn everyone else to get out the minute a fire or smoke is discovered. Don't stop to dress the children or do anything else. Have a flashlight handy at all times.

7. Once out, keep track of all the youngsters—make certain they do not reenter the house.

8. The air is usually better near the floor in a smoke-filled building—remember to stay near the floor or to crawl when moving about.

9. Hold your breath if you have to make a dash through smoke or flame.

10. Never go back into a burning building for any reason—even the smallest, most harmless looking fire can give off deadly smoke and fire gases.

11. It's very dangerous to fling doors open if you think there's a fire—feel the doors first and if they're hot, keep them closed and get out another way or wait for help.

12. Don't jump from upper-story windows—wait for the firemen.

13. Never waste your time or your life by trying to fight a fire—get away from it and call the fire department at once—they know how to fight it.

14. If you're burned or exposed to fire and smoke, get medical treatment at once—seemingly minor burns or smoke inhalation can have fatal results.

Call the Fire Department

1. Know the location of and how to use a fire alarm box, if there is one near your home.

2. Know the location of the nearest telephone that will be available—it may be dangerous to stay behind and use your own phone.

3. Know how to telephone the fire department and how to report where the fire is and what is burning.

Remember, in Case of Fire—

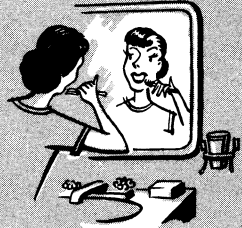
1. Quickly get everyone out of and away from the building on fire. Saving peoples' lives comes first.

2. Then telephone for help.

3. Then, if it is still a small fire, fight it to keep it from spreading. The first 5 minutes may decide whether a fire will get out of hand.

4. If too big and dangerous to fight, concentrate on protecting other buildings, livestock, and property.

SANITATION and HEALTH



Wells, Cisterns, and Pits.

Two distinct kinds of danger are associated with farm wells, cisterns, and pits:

1. Health and sanitation hazards.

2. Risk of bodily injury.

Both exist from the time of construction through the period of use, and after abandonment.

While digging, always shore up—and substantially—the sides of deep openings. Many a person has been buried alive by cave-ins. Always fence or rail off the top of an excavation to save animals or persons from dangerous falls.

The construction or cleaning and repair of a dug well is no job for a man working alone. A companion should always be at the top ready to draw up the worker by rope or to render any other needed assistance. Provide a strong ladder for descending and ascending.

Always keep tools and materials well back from the opening so that they cannot slip or be kicked to fall on the person below.

Foul air or gas frequently collects in an old well, a partially filled silo, or a cistern. It is easy to discover the presence of such foul air or gas by lowering a lighted lantern attached to the end of a rope. If the flame is extinguished, or if it burns feebly, dangerous air is indicated. The answer is ventilation, which can be done by the use of a blower discharging large quantities of fresh air into the silo or at the bottom of the hole through a pipe for 10 minutes before entering. Or, if a blower is not available, a generous quantity of fresh unslaked lime, upon which water has just been poured, will sometimes do the job; in a few hours the lime will have absorbed most of the carbonic acid gas (black damp). Before entering the opening, repeat the test by lighted lantern.

Ventilate before entering silos or pits. Flames do not detect all poisonous gases.

An abandoned well ought to be filled.

Drinking Water. Safety and sanitation have a close affinity in the matter of drinking water. Devices for

safeguarding wells, cisterns, and springs against accident are often devices also for protecting the quality of the water supply.

Uncovered springs, or springs so located as to collect surface runoff, are often sources of contagious diseases. Springs ought to be inspected several times a year and cleaned if needed. Shallow wells located near barnyards or outhouses are danger points. Dairy farms, to meet legal standards of sanitation, are usually subject to frequent inspection, but on many other farms where such standards are not required carelessness creeps in. For the protection of the farm family as well as for the protection of the community, watch the water supply! Relocate the water supply if necessary, and protect it against contamination.

If there is the slightest question of the safety of a water supply, notify the State board of health and make arrangements for test and analysis of the water. Until tests prove the water is safe, it is an elementary precaution to boil all water used for drinking or in food.

Remember, too, that stagnant water allowed to stand in rain barrels or in undrained pools and puddles creates ideal breeding places for mosquitoes.

Poisoning. Medicine boxes and bottles should be kept beyond the reach of small children and be clearly labeled. An overdose of almost any drug can be dangerous. Medicine cabinets should be well lighted.

Other sources of poisoning include poisonous plants, household chemical products and pesticides, poisonous reptiles, and toxic insects. Improperly canned foods may lead to food poisoning.

Pesticides, including insecticides, fungicides, weed killers, and rat poisons, should never be stored in or near the kitchen where there is any chance of their being mistaken for flour, sugar, or other kinds of food.

Wear a respirator, coveralls, or other allover protective clothing when applying the more poisonous sprays or

dusts. After every use launder spray clothes apart from other clothes. Always read pesticide labels and abide by the directions thereon.

When using the highly poisonous phosphorus insecticides and certain of the chlorinated hydrocarbons such as parathion, tetraethyl pyrophosphate (TEPP), systax, or endrin, it is necessary to wear a special respirator of a type that has been tested and approved for this purpose. Wear natural rubber gloves when mixing these insecticides because they can be absorbed through the skin with very serious results. Synthetic rubber gloves will not give adequate protection.

After handling pesticides wash the hands and face thoroughly with soap and water.

Buckets, drums, or other vessels in which sprays are mixed should not be used for any other purpose.

If unused quantities of pesticides must be stored, care should be taken. Pesticides should be stored in such a way that children and animals cannot get into them.

Take care to dispose of empty pesticide containers where children or livestock cannot come in contact with them. Burning of containers may produce poisonous smoke. If they are disposed of in this way, avoid breathing any of the smoke and bury the ashes.

Cuts, Bruises, and Infections. The simplest abrasion may become infected. None should be regarded as "minor." People have died as a result of a scratch or blister. It pays to stop work, no matter how important, long enough to give attention to the injuries from even small accidents.

Gunshot wounds are often fatal. Wounds should be given immediate attention to prevent infection.

Haste and anxiety are causes contributory to many mishaps on the farm—the lifting of something heavy, the turning of an ankle or pulling of a ligament, the slipping of a dull instrument.

Here are a few tips from those experienced in safety measures:

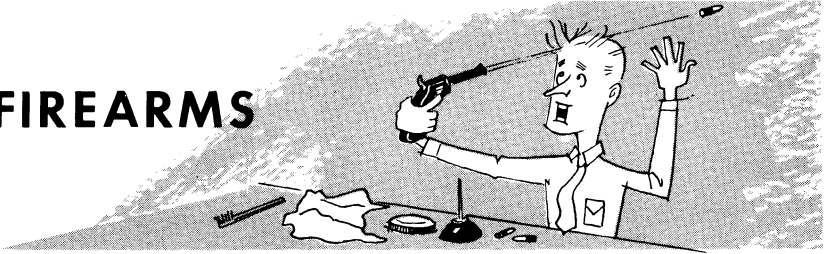
1. Handle all tools and knives carefully.
2. Store them properly; keep them out of the reach of children unable to use them safely.
3. Give the youngsters tools

made to their sizes and needs, and teach them how to use them.

4. Dispose promptly of tin cans, razor blades, broken glassware.

Arrange good light for storage space and have ample space for everything. Then keep everything in its place.

FIREARMS



Firearms are as dangerous in the home as they are outdoors. Half of all deaths from firearms happen at home. Estimates for 1956 show 2,200 total firearm fatalities, with 1,100 in homes.

In hunting deaths, says the National Rifle Association, 45 percent of the cases result from such causes as someone pulling the trigger of an "unloaded" gun or someone who failed to make sure he was not shooting at a person. Poor judgment or poor control is responsible, not accident, the group believes. Also, shotgun blasts account for just over half the hunting fatalities, despite a shotgun's shorter effective range.

On farms, 37 percent of all firearm accidents occur between the ages of 10 and 19.

The National Rifle Association, in its nationwide firearms safety program, urges these simple rules for gun safety:

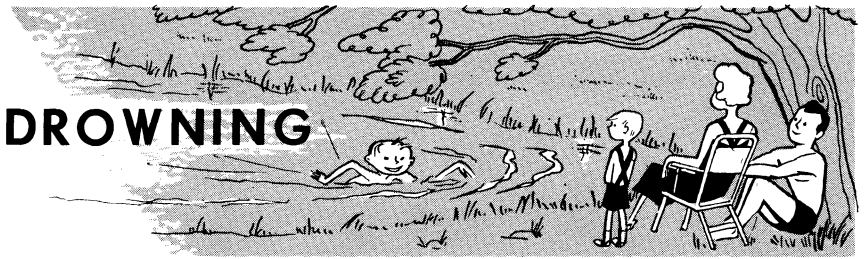
Basic Precautions—applicable wherever there's a gun! Treat every gun as if it were loaded. Always point the muzzle in a safe direction. Be sure of your target.

In the Farm Home. The home is no place for a loaded gun—it only takes seconds to load a gun if you need it. Guns and ammunition should be stored separately—out of reach of children. Cleaning should be done without other people present. When "showing off" the gun, open the action, **BE SURE** it isn't loaded.

In the Car. Unload before putting the gun in the car—wrap or case it if possible. Put the gun in and take it out of the car by the stock, not the muzzle.

In the Field. Be sure gun and ammunition are in good condition—and right for each other. Teach your youngsters how to handle a gun. Don't make them learn guns the hard way! The "safety" should be ON and the trigger finger OFF until ready to fire. Know your target and see all of it before you fire. Unload the gun when you stop, or anytime the footing is bad. Use a club, not your gun, to flush game. Practice self-control. Concentrate on your companions instead of the game.

Above All—
THINK SAFETY! There's just no substitute for it!



Most farm drownings occur between birth and the age of 20. Seventy-three percent of all drownings on farms occur then, and 30 percent occur under age 5.

Each one of us, whatever his age, bears the personal responsibility to see to it that he is safe while in, on, or near the water.

Saving a life starts with saving your own, says the Water Safety Service of the American Red Cross. Here are some tips from them, for safe swimming and boating, to help you do just that—*save your own life*.

1. Learn to swim. You can't think of a better sport to save your life.

2. Always swim with a buddy. Make sure someone is nearby who can help.

3. Swim at a safe place. The presence of lifeguards is usually a good sign the area is safe.

4. Respect the water and know your limitations. Water can be a good friend but a deadly enemy.

5. Don't swim when overheated, overtired, or right after eating.

6. Before diving make sure the water is deep enough and has no hidden objects.

7. In case of trouble, remain calm. Assume a face-up floating position; keep your hands under water and slowly move your hands and feet.

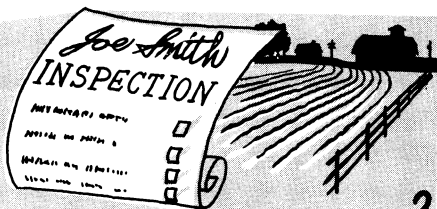
8. Wear a life vest or have a seat cushion life preserver attached to your body by a line when riding in a small boat. Be sure you know how to use the cushion.

9. Stay with your boat or canoe. Most small craft will float when upset or filled with water.

10. Don't "over power" your boat. A motor too powerful for the boat will always cause trouble.

Grownups with children have an added responsibility. They should warn children of the danger of playing near streams and ponds. Eighty percent of all drownings occur within 15 feet of the shore. Use poles, brush, or rope to rescue a person near the shore.

THE SAFE FARM TEST



HOW DOES YOUR FARM MEASURE UP?

Can You Answer Yes to All These Questions?

Machinery and Equipment

Yes No

- Do you keep guards in place on power shafts, belts, and chains to prevent being caught in them? _____
- Do you block machinery and turn off the power before adjusting or unclogging it? _____
- Do you avoid climbing over or around a running combine or thresher? _____
- Do you avoid getting in front of the mowing machine to make adjustments? _____
- Do you avoid stepping over or under moving belts? _____
- Do you avoid wearing loose-fitting, torn clothing or torn, ragged gloves around moving machinery? _____

Livestock

- Are you careful not to surprise animals when approaching them? _____
- Have cattle been dehorned and boars' tusks cut short? _____
- Are small children kept away from pens and barns? _____
- Do you use special care in handling animals with new-born young? _____
- Do you avoid handling the bull by providing a safe bullpen? _____

Motor Vehicles

- Do you know the motor vehicle laws of your State? _____
- Do you walk facing the oncoming traffic on roads? _____
- Is your car in perfect operating condition? _____
- Do you make all the hand signals properly? _____
- Do you give your signals in sufficient time? _____

Hand and Power Operated Tools

- Are hammer and ax heads secure, handles in good condition? _____
- Have you a definite place for every tool when not in use? _____
- Do you stroke from behind when whetting tools to avoid cutting the hand if blade moves too far forward? _____
- Are dangerous tools kept away from play places? _____

Electricity

- Do you have electric cords repaired or discarded when they become frayed or worn? _____
- Are all electrical circuits equipped with proper-size fuses? _____
(Light circuit fuses should generally not exceed 15 amperes.)

	Yes	No
Do you cut off current when working on an electrical conductor?	_____	_____
Are all electrical appliances in proper condition; are they being properly operated?	_____	_____
Do you avoid replacing burned-out fuses with coins, wire, or other metal?	_____	_____

Home and Service Buildings

Are ladders and steps well built and kept in good repair? ..	_____	_____
Do you immediately mop up spilled grease or water?	_____	_____
Do you use a safe stepladder instead of a chair?	_____	_____
Are small rugs kept away from head and foot of stairs and from landings?	_____	_____
Are ladder openings and stairways handrailed? Are hay-chute openings properly protected?	_____	_____
Do you protect water tanks, cisterns, wells, or pools, hazardous to the lives of children?	_____	_____
Do you keep the farmyard clear of garden tools, forks, rubbish, and waste?	_____	_____
Are buildings and fences in good repair?	_____	_____
Are nails promptly removed from loose boards?	_____	_____
Is unused lumber carefully stacked?	_____	_____

Fire

Have you eliminated weeds, brush, old lumber, and other similar fire hazards from around buildings?	_____	_____
Do you have chimneys and stovepipes inspected and cleaned regularly?	_____	_____
Have you approved type of fire extinguishers at building entrances, and are they checked at regular intervals?	_____	_____
Do you avoid burning rubbish on a windy day or near buildings or haystacks?	_____	_____
In the absence of an organized rural fire department, do you have definite arrangements with neighbors to come with tools, water, and ladders in case of fire?	_____	_____

Sanitation and Health

Are all poisons separately stored and clearly identified?	_____	_____
Do you store your pesticides out of reach of children or others not aware of their danger?	_____	_____
Do you keep children and other uninformed people out of orchards or fields where the more poisonous pesticides are being used?	_____	_____
Do you read and observe the directions for use on pesticide labels?	_____	_____
Do you properly dispose of empty pesticide containers?	_____	_____
Are medicines stored separately, and unused and unneeded medicines discarded promptly?	_____	_____
Do you avoid overexposure to sun, and avoid heat collapse by drinking plenty of water and taking plenty of salt?	_____	_____
Have you a first-aid kit? Do you know first-aid?	_____	_____
Do you avoid starting and running gasoline equipment in buildings with closed doors?	_____	_____
Do you wear gloves when working on wire fences?	_____	_____

	Yes	No
Are toys with sharp points and edges discarded?-----	_____	_____
Are sharp-edged tools kept away from small children?----	_____	_____
Is skillful use of knives and other tools learned?-----	_____	_____

Firearms

Do you keep the firearms on your farm unloaded?-----	_____	_____
Do you keep firearms out of reach of small children?----	_____	_____
Do you always handle firearms as if they were loaded?---	_____	_____
Have you trained your older children in the safe handling of firearms?-----	_____	_____
Do you accompany your children when they go hunting?--	_____	_____
Do you know and see all of your target before you fire?---	_____	_____
Do you concentrate on your companions rather than on the game?-----	_____	_____

Drowning

Have you learned to swim?-----	_____	_____
Do you swim with someone else and in a safe place?-----	_____	_____
Do you avoid swimming when overheated, overtired, or when you have just eaten?-----	_____	_____
Have you warned your children of the dangers of playing near streams and ponds?-----	_____	_____
Do you know what to do when someone else is in trouble in the water?-----	_____	_____

This is only a partial list of hazards. You are invited to expand upon it and submit suggestions and questions to your county agricultural and home demonstration extension agents.

Inspection Points the Way to Protection

SPECIAL OCCASIONS



promoting farm safety and fire prevention are listed below. Some suggestions for promoting safe driving are also given. Everyone interested in farm safety can participate in these activities.

SPRING CLEANUP WEEK

(The dates for this week are set by State or local proclamation, ranging from early March in the Southern States to late May in the North.)

This week, sponsored by the National Fire Protection Association with the United States Department of Agriculture cooperating, is the focal point in a national campaign to prevent fire,

accidents, and disease. As the name implies, its primary purpose is to urge everyone to clean up around his farmstead and home and remove those hazards that endanger property, health, and well-being. Farm people everywhere can make their farm grounds and home a safer and more pleasant place to live by cleaning up and disposing of the winter's collection of trash and debris during Spring Cleanup Week.

FARM SAFETY WEEK

(The last full week in July.)

This national week, proclaimed by the President of the United States, is sponsored by the National Safety Council in cooperation with the United States Department of Agriculture. Its chief aim is to educate farm people to work and live safely through the whole year. Through intensive publicity and informational efforts during the week, farmers are aided in thinking of the accident hazards that lurk in their everyday surroundings and what they can do to correct or remove them. Farm people are urged to participate in local activities and to help reduce the huge toll in lives, injuries, and property damage claimed by accidents on the farm each year.

FIRE PREVENTION WEEK

(The week including October 9 of each year.)

This national week annually designated by Presidential proclamation is sponsored by the National Fire Protection Association with the United States Department of Agriculture cooperating. It is observed in virtually every city and town in the country and provides farm people with an oppor-

tunity to take part in the national campaign for fire safety. It also serves as a reminder to farm people to remove or correct those fire hazards that exist on their farms. Fire Prevention Week, coming just at the beginning of the winter heating season, is an excellent time to check heating appliances and make certain they are in safe operating condition.

SAFE DRIVING

In September 1956 President Eisenhower made the following statement:

"For 18 months American traffic fatalities have been increasing. If this trend continues through the rest of the year, we shall have the highest motor vehicle death toll in history.

"It is shockingly clear that each of us must assume personal responsibility, not only for driving and walking safely, but for supporting our State and local public officials as they seek to enforce and strengthen our safety programs.

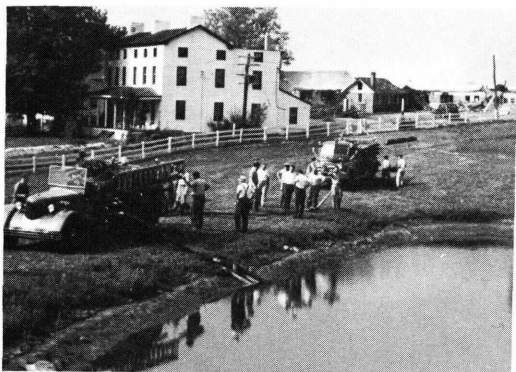
"The Traffic and Transportation Conference has come forward at a critical time with its year-around program to 'BACK THE ATTACK ON TRAFFIC ACCIDENTS.'

"I hope all our citizens will take part in this program."

This program should be carried out throughout the year by attacking the safety program in each community. Each individual has a responsibility to reduce traffic accidents.

Three-fourths of the fatalities from motor vehicles in the United States occur on rural highways. Motor vehicles are the source of 40 percent of the fatal accidents occurring to farm people.

You may obtain additional information about the local activities from your county agricultural extension office. You will be helping yourself as well as your community by taking an active part in observing and promoting safety throughout the year. Act for safety until it becomes a habit.



The barn burned (right background) but water from the pond saved other buildings. SCS 79804



No mangled limbs if you cover the power takeoff. N-11765



No accidents here—face guard, gloves, and a vise prevent them. REA 13180



Paint bottom step white—you'll save bruised shins, nasty tumbles. Kans. Ext. Service



Learn safe handling of gun while young. Handle every gun as if it were loaded. Kans. Ext. Service



Take no chances—always use mask when dusting. N-10024

N-10024



THE TIME for SAFETY is NOW

FARMING IS DANGEROUS

Each year on farms and highways about 13,000 farm people are killed, about 1,100,000 farm people are injured.

More people are killed each year in farmwork accidents (about 3,700 deaths) than in any other major industry. . . . National Safety Council.

ALWAYS BE CAREFUL

Become Safety-Minded . . . Find Danger Spots . . . Get Rid of Them . . . Train Others the Safety Way.

SAFETY IS IN YOUR HANDS

An Ounce of Prevention May Be Worth \$1,000 Worth of Cure.